Complete Summary

TITLE

Comprehensive diabetes care: percentage of members 18 through 75 years of age with diabetes mellitus (type 1 and type 2) who had a hemoglobin A1c (HbA1c) test during the measurement year.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of members 18 through 75 years of age with diabetes (Type 1 and Type 2) who were continuously enrolled during the measurement year and who had a hemoglobin A1c (HbA1c) blood test.

This measure is a component of a composite measure; it can also be used on its own.

Note from the National Quality Measures Clearinghouse (NQMC): For this measure there is both Administrative and Hybrid Specifications. This NQMC measure summary is based on the Administrative Specification. Refer to the original measure documentation for details pertaining to the Hybrid Specification.

RATIONALE

Diabetes is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or use the hormone insulin. It is one of the leading causes of death and disability in the U.S. More than 20 million Americans live with diabetes today. One-third of people with diabetes are not diagnosed. Much of the burden of illness and cost of diabetes treatment is attributed to potentially preventable long-term complications including heart disease, blindness, kidney disease and stroke. Timely screening and treatment can significantly reduce the disease burden.

PRIMARY CLINICAL COMPONENT

Diabetes mellitus; hemoglobin A1c (HbA1c)

DENOMINATOR DESCRIPTION

Members with diabetes (Type 1 and Type 2) 18 through 75 years of age as of December 31 of the measurement year (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

A hemoglobin A1c (HbA1c) test performed during the measurement year as identified by claim/encounter or automated laboratory data (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 through 75 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See the "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

- People with diabetes are 2 to 4 times more likely than others to die as a result of heart disease.
- Diabetes accounts for almost 45 percent of new cases of kidney failure.
- 60 to 70 percent of people with diabetes have mild to severe forms of nervous system damage, including impaired sensation in the feet and hands and carpal tunnel syndrome.
- Diabetic retinopathy, the damage of blood vessels in the retina, is the most common diabetic eye disease and a leading cause of blindness, causing 12,000 to 24,000 new cases of blindness annually.
- Patients with diabetes who maintain near-normal hemoglobin A1c (HbA1c) levels gain, on average, an extra five years of life, eight years of eye sight and six years of freedom from kidney disease.

EVIDENCE FOR BURDEN OF ILLNESS

American Heart Association. Heart disease and stroke statistics - 2008 update. Dallas (TX): American Heart Association; 2008. 43 p.

Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2007. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008. 14 p.

Heart disease and stroke statistics - 2007 update. Dallas (TX): American Heart Association; 2007. 43 p.

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Kidney disease of diabetes. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); 2008 Jan. 8 p.

National Institute of Neurological Disorders and Stroke (NINDS). Peripheral neuropathy fact sheet. [internet]. Bethesda (MD): National Institute of Neurological Disorders and Stroke (NINDS); 2008 Jan 10[accessed 2008 Feb 28].

UTILIZATION

Unspecified

COSTS

- The cost of diabetes totaled $174 billion in 2002, including $58 billion in indirect costs, such as work loss, mortality and disability.
- Medical costs for people with diabetes are more than double the medical costs of others.

EVIDENCE FOR COSTS

Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2007. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008. 14 p.

Hogan P, Dall T, Nikolov P. Economic costs of diabetes in the US in 2002. Diabetes Care2003 Mar;26(3):917-32. [31 references] PubMed

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members with diabetes (Type 1 and Type 2) 18 through 75 years of age as of December 31 of the measurement year who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days (commercial, Medicare) during the measurement year and not more than a one-month gap in coverage (Medicaid)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Members with diabetes (Type 1 and Type 2) 18 through 75 years of age as of December 31 of the measurement year

Two methods to identify members with diabetes: pharmacy data and claim/encounter data. The organization must use *both* to identify the eligible population, but a member only needs to be identified in one to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Pharmacy data. Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or the year prior to the measurement year on an ambulatory basis. Refer to Table CDC-A in the original measure documentation for prescriptions to identify members with diabetes.

Claim/encounter data. Members who had *two* face-to-face encounters with a diagnosis of diabetes (refer to Table CDC-B in the original measure documentation for codes to identify diabetes) on different dates of service in an outpatient setting or nonacute inpatient setting, or one face-to-face encounter in an acute inpatient or emergency department (ED) setting during the measurement year or year prior to the measurement year. The organization may count services that occur over both years. Refer to Table CDC-C in the original measure documentation for codes to identify visit type.

Exclusions

- Exclude members with a diagnosis of polycystic ovaries (refer to Table CDC-O in the original measure documentation for codes to identify exclusions) who did not have any face-to-face encounters with the diagnosis of diabetes (refer to Table CDC-B in the original measure documentation for codes to identify diabetes), in any setting, during the measurement year or year prior to the measurement year. Diagnosis can occur at any time in the member's history, but must have occurred by December 31 of the measurement year.
- Exclude members with gestational or steroid-induced diabetes (refer to Table CDC-O in the original measure documentation) who did not have any face-to-face encounters with a diagnosis of diabetes (refer to Table CDC-B in the original measure documentation for codes to identify diabetes), in any setting, during the measurement year or year prior to the measurement year. Diagnosis can occur during the measurement year or year prior to the measurement year, but must have occurred by December 31 of the measurement year.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
A hemoglobin A1c (HbA1c) test performed during the measurement year as

identified by claim/encounter or automated laboratory data. Use any code listed in Table CDC-D in the original measure documentation to identify HbA1c tests.

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Laboratory data
Pharmacy data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Comprehensive diabetes care (CDC) [hemoglobin A1c (HbA1c) testing].

MEASURE COLLECTION

HEDIS® 2009: Healthcare Effectiveness Data and Information Set

MEASURE SET NAME

Effectiveness of Care

COMPOSITE MEASURE NAME

Comprehensive Diabetes Care

DEVELOPER

National Committee for Quality Assurance

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency

and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

1999 Jan

REVISION DATE

2008 Jul

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2008. Healthcare effectiveness data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2007 Jul. various p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

MEASURE AVAILABILITY

The individual measure, "Comprehensive Diabetes Care (CDC) [Hemoglobin A1c (HbA1c) Testing]," is published in "HEDIS® 2009. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on June 16, 2006. The updated information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on February 19, 2008. The information was verified by the measure developer on April 24, 2008. This NQMC summary was updated again by ECRI Institute on March 12, 2009. The information was verified by the measure developer on May 29, 2009.

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